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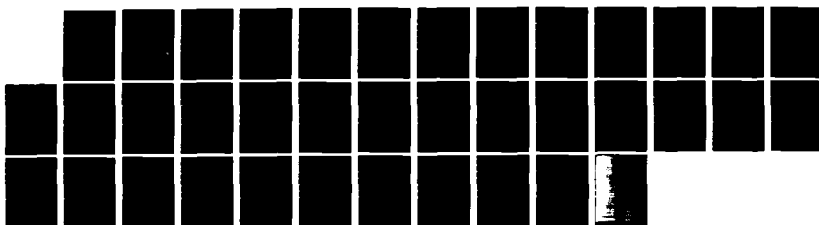
AGE GRADING: THE IMPLICIT ORGANIZATIONAL TIMETABLE(U)
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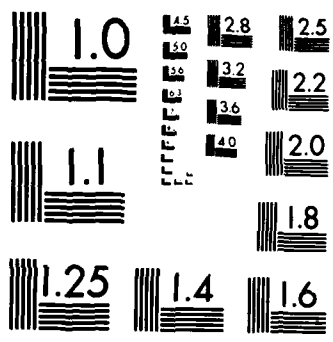
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Age Grading: The Implicit Organizational Timetable^{1,2}

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March 1983

TR ONR 14

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- ² A revised version of this paper to appear in The Journal of Occupational Behaviour, 1983 (forthcoming). This research was supported by grants from the Administration on Aging #90 ATO O 33/11 and the Office of Naval Research, Contract N00014-80-C0905; NR 170-911.

ABSTRACT

The age distribution within an organization forms an implicit career timetable, and there is evidence that people use their perceptions of this timetable to determine whether their careers are on or off schedule. Questionnaire data were collected from managers (N=488) within a large electric utility. The results indicate that managers who see themselves as "behind time" in their careers have more negative attitudes towards work than other managers, even when their perceptions of being "behind time" are inaccurate. In addition, the longer managers remain in the same job, the more likely they are to define themselves as "behind time." This supports other research suggesting that lateral moves within organizations may be an important device for managing the normal limitations of upward movement in managerial careers.

Organizations often have elaborate mechanisms for appraising performance. However, employees get the most vivid assessments of their work from what they see everyday on the job. They observe others who are labelled as successful or unsuccessful and ask, "How am I doing compared to them?" This process of comparison involves many factors, but one of the most critical is age. The ages of employees in different positions form an implicit career timetable, and there is evidence that people use their perceptions of this timetable to determine whether their careers are on or off schedule.

In a study of managers between the ages of 35 and 39 in two British companies, Sofer (1970:273-274) found an acute sensitivity to the career timetable. Managers were clearly aware of where they should be in their careers at given ages and showed considerable concern if they were behind schedule. This sensitivity is also evident in Kidder's (1982:104) description of young computer engineers in the Data General Corporation. Immediately after beginning work, these engineers noticed that the careers of people "like me" ended mysteriously at age thirty, suggesting an uncertain future in the organization.

These examples show that in addition to being well aware of age expectations in their organizations, employees are concerned about how their progress fits with the implicit career timetable. The purpose of this study is to examine how perceptions of being on and off schedule with the career timetable affect employee's attitudes towards work.

To provide the context for this study, a few comments on the importance of age in social groups are in order. The unalterable character of chronological aging makes it one of the most widely shared of human experiences. As a result, strong expectations develop about age

appropriate behavior. Adults are assumed to be wise and children are allowed to make mistakes. People are admonished to "act your age" when they behave in an unexpected manner for someone of their age. Age is both an individual and social experience, and, as a result, it exerts a tremendous influence on people's lives.

Empirical evidence supports the belief that age assumptions and expectations underlie behavior in all social groups (Eisenstadt, 1956; Neugarten & Datan, 1973; Riley et al., 1972). There is consensus that 1) there are behaviors that are acceptable at specific ages, and 2) there is an order in which these behaviors are expected to occur in a person's lifetime. Age assumptions and expectations form the clock against which people measure their lives. Are they on-time or off-time with what is seen as normal progress in life?

Previous work suggests that being off-time has a negative impact on people's lives. Bernice Neugarten et al. (1968), who first described the notion of being on-time or off-time, found that people who see themselves as off-time are more likely to experience crises in their lives than those who are on-time. This finding has found support in studies of young men and middle-aged men and women. Hogan (1978, 1980) found that being off schedule had a negative effect on the lives of young men. He observed demographic patterns of age-specific life events, such as finishing school, beginning work, and getting married. The results suggest that deviance from normal progress, as defined by those demographic patterns, is related to higher rates of marital disruption and lower total earnings. In an exploratory study of men and women making midlife career changes, Lawrence (1980) found that subjects who were on schedule with major family life

events, such as marriage and the birth of children, were less likely to experience career change as a crisis than those who were off schedule.

Although these studies suggest that being off schedule does have a negative impact on people, there are two distinctly different ways of being off schedule. People can be either ahead of schedule or behind schedule. Because being ahead of schedule is generally perceived in a more positive light than being behind schedule, these two ways of being off schedule are unlikely to have the same impact on people. Thus, the definition of being on or off schedule with age expectations of normal progress should include three, instead of two, categories: ahead of schedule, on schedule, and behind schedule.

In work organizations, age-defined timetables are apparent in the expectations that develop around career movement. These age expectations form an implicit but powerful environment to which members must respond. The focus in this study is on the age expectations of managerial careers, and the term career refers to the set of hierarchical positions managers might expect to traverse during their tenure with a given organization.

The perception of age expectations that define normal progress through a career within an organization requires two judgments. First, managers must observe the age distribution of the different career levels within their organization, and second, they must make a judgment as to what range of ages represents normal progress, fast progress, and slow progress. Their perception of their own position on the organizational timetable is based on the results of these judgments. Position on the organizational timetable carries with it inherent positive and negative associations. Typically, it is assumed that managers who see themselves as younger than normal will define themselves as "fast-track," or "water walkers."

Conversely, managers who see themselves as older than normal may see themselves as marooned on a "slow track to nowhere." Kanter (1977:133-136), for example, calls these two groups of managers the "mobile" and the "stuck." Given the positive and negative attitudes associated with being ahead of or behind time, the central hypothesis of this study is that managers who see themselves as ahead of time have more positive attitudes towards work than managers who see themselves as either on time or behind time.

The Problem and the Method

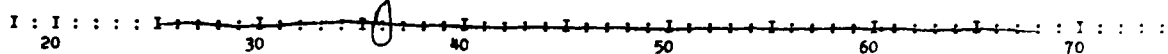
The Instrument

A questionnaire was designed to assess managers' age judgments of the career timetable within their organization and to examine the relationship between their beliefs and work attitudes. The questionnaire was developed in several stages through pre-testing with MBA students (22-30 years old), middle managers in the Sloan Fellows Program (35-45 years old), and executives in the Senior Executives Program (45-60 years old) at the Sloan School of Management, MIT. An additional pre-test was conducted with a small group of managers within the company eventually studied.

In order to obtain managers' perceptions of the career timetable, they were asked to give, for each hierarchical level in their organization, their judgment of 1) the typical age of individuals in that level, and 2) the age range of individuals in that level. In the following example, the responses suggest that Supervisors are between the ages of 25 and 68 and typically 36 years old.

GIVE THE TYPICAL AGE AND AGE RANGE OF MANAGERS HOLDING THE SPECIFIED POSITIONS.

1. In my perception is that Supervisors are:



In order to measure managers' perceptions of how far off schedule they are in their organizational careers, managers' judgments of the typical age for their own career level were subtracted from their own age. Thus, the individual age discrepancy of a 40 year old, first level manager who judged the typical age for his or her level to be 32, would be eight. Although this measure identifies the extent to which managers' ages are discrepant with their perceptions of what is typical for their career level, it does not identify directly whether managers perceive themselves as ahead, on, or behind time. However, the data show that people in the organization that was studied believe the average time in every career level is three to four years. Thus, it seems reasonable to expect that managers who are within two years of what they believe is typical for their own career level identify themselves as on time, and that managers who are seven or more years younger than what they believe is typical, roughly two career levels, identify themselves as ahead of time. In view of recent evidence that people continue to hope that things will get better even after the average length of time for career advances has passed (Bailyn, 1982, work in progress), a somewhat larger age discrepancy of ten years or more--almost three career levels--seems reasonable to identify managers who see themselves as behind time. The population of managers was divided therefore into three groups: 1) managers with an individual age discrepancy between -2 and +2 were classified as on time; 2) managers with an individual age discrepancy less than -7 were classified as ahead of time;

and 3) managers with an individual age discrepancy of greater than +10 were classified as behind time. Managers in the two inbetween categories (-3 to -6, +3 to +9) were eliminated from the analysis. Given the shared belief that age differences between career levels are around three to four years, the psychological meaning of age discrepancies in these inbetween categories is more tenuous.

The data suggest that the three categories accurately identify managers who see themselves as either on time, ahead of time, or behind time in their organizational careers. However, two cautions should be noted. First, there is no direct measure to confirm managers' actual feelings of being on or off time; therefore, it is possible that some managers are not accurately classified. Second, the boundaries defining the on and off time categories are based on data from the organization that was studied and are not necessarily generalizable to other organizations.

The questionnaire includes nine questions on work attitudes. Two questions are based on items from the Job Diagnostic Survey (Hackman & Oldham, 1980), four questions come from the MIT Alumni Survey (Bailyn & Schein, 1980), and three are new to this questionnaire. Two of the questions ask respondents about their satisfaction with current career or occupation (#1, #2). Two questions inquire about subjects' feelings of success (#3, #4) in their work and two questions examine subjects' work motivation (#5, #6). These questions use six-point scales, with responses anchored to statements of how strongly subjects agree or disagree. The final three questions elicit information about subjects' work orientation (#7-#9), as measured by their stated probability of leaving the organization for changes in various aspects of work. These questions use five-point scales, with responses anchored to statements of how likely a

given inducement would be to influence the subject to leave the company within five years. High scores on these questions suggest that managers are sufficiently work oriented that they would consider leaving the organization in order to meet their needs for a particular work environment.

The Sample

The study was conducted in a large electric utility in the northeastern United States. The Bennix Power Company (not its real name) is an old, established organization. Traditionally, people come to work in the company after finishing school and remain until retirement. This is reflected in the high correlation between age and number of years tenure with the organization ($r=.84$). The average age of exempt employees is 45 (range=22-66) and the average tenure is 20 years (range=0-45). Managerial careers in this company have eight levels: Level 1 is a first level supervisory position and Level 8 includes the Chief Executive Officer & President. The time-honored route in management is to "move up the ranks" from positions requiring engineering backgrounds, a slow process in an organization such as this.

The questionnaire was distributed through company mail to all exempt employees. A stamped envelope was enclosed with each questionnaire, to be returned to MIT through US mail. One follow-up memorandum was distributed. Company concerns prohibited extensive follow-up procedures. Forty-seven percent ($N=488$) of all exempt employees returned the questionnaire. Actual demographic data were obtained on the age, sex, functional area, number of years tenure with the company, and hierarchical level of all employees. A comparison of these values with values obtained from respondents to the

questionnaire shows that the sample has demographic characteristics similar to those of the population.

Findings

The division of the original sample into three groups based on individual age discrepancies produced a subsample of 245 managers. Thirty-three percent (N=82) of these managers perceive themselves to be ahead of schedule, 28% (N=68) perceive themselves to be on schedule, and 39% (N=95) perceive themselves to be behind schedule. All the managers within this organization show relatively high levels of work satisfaction and work orientation, thus the findings are based on a comparison of differences between the groups. This means that groups with more negative attitudes are not necessarily dissatisfied. It only means that they are less satisfied than other groups.

This analysis examines the global pattern of responses to aspects of work satisfaction and work orientation. The items presented here are not meant to represent all possible components of these attitudes towards work. For each question, the "percent who agree" represents the fraction of managers who responded in the two highest categories for that question. The Kruskal-Wallis T reported for each table tests whether or not the ranking of the responses of the three groups is the same across all nine questions. If differences for the three groups are significant, differences between pairs of groups are also examined (Conover, 1980:229-239).

Table 1 shows the percentage of each group that agreed with each of the nine questions. This table shows clear differences between the three groups ($p < .001$). In all cases except for one, people who see themselves as

TABLE 1
Work Attitudes By Individual Age Discrepancy

	PERCENT WHO AGREE		
	Ahead of Time N=82	On Time N=68	Behind Time N=95
<u>Work Satisfaction:</u>			
1) Generally speaking, I am very satisfied with my current career choice.	78	69	58
2) I wish I were in a completely different occupation.*	79	69	53
3) Generally speaking, I am very satisfied with my career progress.	59	56	48
4) I am considered a successful person in this company.	69	58	49
5) I like to think about my work even when off the job.	51	55	30
6) My only interest in my job is to get the money to do the other things I want to do.*	82	74	57
<u>Work Orientation:</u>			
7) A higher salary would influence me to leave this company within five years.	55	42	38
8) A more challenging job would influence me to leave this company within five years.	71	59	37
9) Greater opportunity for advancement would influence me to leave this company within five years.	75	57	42
* Percent Who Disagree			

Kruskal-Wallis T = 12.46
df = 2
p < .001

Ahead of Time & On Time, p < .001
Ahead of Time & Behind Time, p < .001
On Time & Behind Time, p < .001

ahead of time are more satisfied with and more oriented towards work than either those who see themselves as on time ($p < .001$) or those who see themselves as behind time ($p < .001$). In addition, managers who are on time have more positive attitudes than those who are behind time. These results clearly support the hypothesis that managers who perceive themselves as ahead of time have more positive attitudes towards work than those who see themselves as either on time or behind time.

However, by definition, a person's perception of age discrepancy is related to his or her own age. It is difficult for a 55 year old manager to perceive him or herself as ahead of time, simply because it is not possible in this organization to be ahead of time at that age. Table 2 shows that, in fact, there is a strong relationship between the ages of managers and their individual age discrepancy ($r = .788$, $p < .001$). As managers get older, they are more likely to perceive themselves as behind time.

The literature suggests that job satisfaction is positively related to age and the number of years a person has worked in an organization (Andrisani et al., 1977; Janson & Martin, 1981; Van Maanen & Katz, 1976). For this reason, the relationship observed in Table 1, suggesting that managers who perceive themselves to be ahead of time are the most satisfied, is surprising because these managers are the youngest of the three groups. This unexpected relationship may be explained by a second age-related observation about work, which is that the centrality of work varies over the life span (Evans & Bartolome, 1981; Schein, 1978). Young managers who are just beginning careers and families tend to be more involved with their work than older managers who often become more family oriented. As children grow older and the major career goals have either

TABLE 2
Age By Perceptions of Being On or Off Time

Age	Ahead of Time % (N)	On Time % (N)	Behind Time % (N)
< 35	53 (36)	11 (9)	5 (5)
35-50	47 (32)	57 (47)	28 (26)
> 50	0 (0)	32 (26)	67 (64)
Total:	100 (68)	100 (82)	100 (95)

$\chi^2 = 108.9$
df = 4
p < .001

$\gamma = .788$
p < .001

been achieved or not achieved, the pattern of work-family accommodations changes (Bailyn, 1978). In order to see whether the centrality of work is a possible explanation for the observed relationship between perceived time categories and work attitudes, a single age group, managers between the ages of 35 and 50, was examined.

Excluding the Chief Executive Officer and President in this company, the actual average ages for all career levels fall between 47 and 54. Thus, being on or off time is probably most critical for managers between the ages of 35 and 50 who are facing knowledge of the probable outcome of their career with the company. In addition to perceived organizational constraints, people at this age also face age expectations outside their organizational lives. The expectation is that if people wait any longer to make major job changes, they will be perceived as "too old" and will be

unable to find other work (Lawrence, 1980). Even if they have no intention of actually leaving, 35 to 50 year-old managers in this company must face the realization that future options are probably limited. For these reasons, the issue of "How I am doing in my career" is likely to be highly salient to these individuals, thus minimizing the expected differences between the three groups. It is possible that dissatisfied employees in this age category have already left the company, in which case, those who remain have already adapted to staying. However, the low turnover in this organization suggests that this would have little effect on this sample.

Table 3 shows the work attitude scores of managers between the ages of 35 and 50. Although the three groups are still significantly different ($p < .01$), the differences have diminished. Those who see themselves as on time are now similar to those who see themselves as ahead of time ($p = n.s.$). On four of the nine questions, on time managers are more satisfied with and more oriented towards work than ahead of time managers. It is interesting to note, that, even though the two groups are similar, people who see themselves as ahead of time are still 1) more satisfied with their own career progress, and 2) more likely to feel they are considered successful by others than those who are on time. However, despite the fact that on time and ahead of time groups are similar, the behind time group remains more negative about work than either group on all nine questions ($p < .01$; $p < .01$). Thus, it appears that although controlling for the probable centrality of work using age reduces the differences between the three groups, people who see themselves as behind time are still less satisfied with and less oriented towards their work.

One possible explanation for these results is that behind time managers are really behind schedule and thus have a legitimate reason for

TABLE 3
Work Attitudes By Individual Age Discrepancy
Subsample: Ages 35-50

	PERCENT WHO AGREE		
	Ahead of Time N=32	On Time N=47	Behind Time N=26
<u>Work Satisfaction:</u>			
1) Generally speaking, I am very satisfied with my current career choice.	69	70	35
2) I wish I were in a completely different occupation.*	84	63	39
3) Generally speaking, I am very satisfied with my career progress.	66	45	31
4) I am considered a successful person in this company.	68	57	56
5) I like to think about my work even when off the job.	50	58	31
6) My only interest in my job is to get the money to do the other things I want to do.*	78	79	56
<u>Work Orientation:</u>			
7) A higher salary would influence me to leave this company within five years.	50	49	44
8) A more challenging job would influence me to leave this company within five years.	63	68	46
9) Greater opportunity for advancement would influence me to leave this company within five years.	72	74	68
* Percent Who Disagree			

Kruskal-Wallis T = 10.51
df = 2
p < .01

Ahead of Time & On Time, p = n.s.
Ahead of Time & Behind Time, p < .01
Ahead of Time & Behind Time, p < .01

their feelings. The actual career schedule of managers was measured using the actual age distribution for each career level. Managers more than one standard deviation younger than average are considered actually ahead of schedule, managers within one standard deviation of the average are considered actually on schedule, and managers more than one standard deviation older than average are considered actually behind schedule. Thus, being behind schedule means being older than the average age for one's own level. It does not mean being behind the normal pattern of mobility with age (e.g. Rosenbaum, 1979a, 1979b). Using this measure of the actual career schedule, none of these 35 to 50 year-old managers is actually behind schedule. The youngest average age for any career level in the company is 47 with a standard deviation of 6, meaning that managers must be over 53 before they are really behind schedule. Table 4 shows how many of the managers in each perceived time category are actually ahead of schedule, actually on schedule, or actually behind schedule.

TABLE 4
Actual Schedule by Perceived Schedule
Subsample: Ages 35 - 50

ACTUAL SCHEDULE	PERCEIVED SCHEDULE		
	Ahead of Time % (N)	On Time % (N)	Behind Time % (N)
Ahead of Schedule	50 (16)	21 (10)	4 (1)
On Schedule	50 (16)	79 (37)	96 (25)
Behind Schedule	0 (0)	0 (0)	0 (0)
Total:	100 (32)	100 (47)	100 (26)

The lack of accuracy of perceptions in the group that perceives itself as behind time is particularly marked when compared to the other two groups. Half of those who see themselves as ahead of time and 79 percent of those who see themselves as on time are accurate in their perceptions.

The judgments of managers who see themselves as behind schedule clearly are not based on the actual age distribution within the organization. However, their negative feelings of work satisfaction and work orientation may be the indirect result of these age distributions. In other words, work attitudes may be explained by where managers actually are in their careers rather than where they think they are. Thus, the behind time group has more negative attitudes because almost all of this group is actually on schedule, and all managers who are actually on schedule have more negative attitudes regardless of their perceptions. Table 5 includes all managers 35-50 who are actually on schedule compared by their perceptions of being on or off time.

In three of the nine questions, those who see themselves as on time have more positive attitudes towards work than those who see themselves as ahead of time ($p=n.s.$), and for the first time, the behind time group has more positive attitudes than the on time group on two questions, even though the scores are nearly identical. However, despite the fact that being actually on schedule reduces the differences between these three groups, the behind time group is still consistently more negative than those who see themselves as ahead of time. Feelings of work satisfaction and work orientation thus appear to be related to the joint effect of perceptions and reality. Although perceptions do appear to influence work attitudes, the effect of these perceptions seems to be mitigated by the manager's actual position on the organizational career timetable.

TABLE 5
Work Attitudes By Individual Age Discrepancy
Subsample: Ages 35-50 and Actually On Schedule

	PERCENT WHO AGREE		
	Ahead of Time N=16	On Time N=37	Behind Time N=25
<u>Work Satisfaction:</u>			
1) Generally speaking, I am very satisfied with my current career choice.	69	70	32
2) I wish I were in a completely different occupation.*	81	64	40
3) Generally speaking, I am very satisfied with my career progress.	58	41	28
4) I am considered a successful person in this company.	63	53	54
5) I like to think about my work even when off the job.	44	62	32
6) My only interest in my job is to get the money to do the other things I want to do.*	75	73	54
<u>Work Orientation:</u>			
7) A higher salary would influence me to leave this company within five years.	44	41	42
8) A more challenging job would influence me to leave this company within five years.	56	62	44
9) Greater opportunity for advancement would influence me to leave this company within five years.	69	68	67
* Percent Who Disagree			

Kruskal-Wallis T = 8.34
df = 2
p < .05

Ahead of Time & On Time, p = n.s.
Ahead of Time & Behind Time, p < .05
On Time & Behind Time, p < .05

The findings discussed to this point suggest that managers who believe they are off-time with the career timetable are more negative towards aspects of their work. This is intriguing because, without exception, these managers' perceptions are inaccurate. A remaining question then is how people make the age judgments that result in these negative feelings.

Managers who see themselves as behind schedule may have had different career paths than those who see themselves as either ahead or on time. As described by Bailyn (1979), 35-50 year old middle managers may either have been plateaued for years in their current position after rapid career movement early in their careers, or they may have achieved their current position only recently after slow movement throughout their organizational tenure. Managers who have not changed jobs recently may compare themselves with others of similar ages and feel behind schedule and "deprived" when they see managers in their comparison group begin new jobs (Adams, 1965; Martin, 1981). These feelings of deprivation could then result in more negative work attitudes.

The data in this study are cross-sectional, thus the entire career paths of these individuals cannot be examined. However, the number of years subjects have been in their current jobs provides an indication of recent career movement. Table 6 shows that, in fact, people who see themselves as behind schedule are much more likely to have been in their current jobs longer than four years than those who see themselves as ahead of or on time--even when those groups are controlled for age and actual time category. Although these findings are suggestive, additional research needs to be conducted to understand the process by which people make and then interpret age judgments of managerial careers.

TABLE 6
Number of Years in Current Job
Subsample: Ages 35-50 and Actually on Schedule

NUMBER OF YEARS IN CURRENT JOB	PERCEIVED SCHEDULE			
	Ahead & On Time		Behind Time	
	%	(N)	%	(N)
0 - 4 Years	61	(30)	22	(5)
5 + Years	39	(19)	78	(18)
Total:	100	(49)	100	(23)

Summary and Discussion

These data support the original hypothesis that managers who see themselves as ahead of time, are more satisfied with and more oriented towards their work than other managers. In general, managers who feel they are ahead of time have more positive work attitudes than managers who feel they are on time, and managers who feel they are on time have more positive work attitudes than those who feel they are behind time. However, the relationship between individual age discrepancies and work satisfaction and work orientation is not linear. Although managers who see themselves as behind time are always the most negative group, the ahead of time and on time groups have similar attitudes when controlled for age and actual time schedule. The comparatively negative attitudes of the behind time group may be explained by the joint effect of perceptions and actual position on the organizational timetable.

Managers' judgments of whether they are on or off time frequently are inaccurate. These judgments may be related to the recent career movement of the manager. Managers are more likely to see themselves as ahead of time or on time if they have started new jobs within the last four years. This suggests that relative deprivation is a possible explanation for the age judgments and comparative dissatisfaction of the behind time group.

There are two major implications of this study. First, although some researchers suggest that age distributions, also referred to as age demography, are the single critical factor in explaining some organizational outcomes (Pfeffer, 1982), these distributions alone clearly are not sufficient for understanding the relationship between age and work attitudes. Both individual perceptions and demographic information on age must be considered. Second, if it is true that managers define themselves as behind schedule as a result of infrequent job moves, then organizations can alleviate some of the comparatively negative feelings experienced by this group by providing alternative job opportunities. It is possible that movement in itself rather than upward movement is what is critical in determining age judgments. Lateral moves (Hall, 1976; Schein, 1978; Stoner et al., 1980) may be just as effective an intervention as vertical moves. This has significant implications in a time when an aging work force decreases the opportunity for upward mobility within organizations.

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